

RIVERS AND FLOODS

By R. E. SPENCER

The only rises of consequence during August were a few widely scattered flash floods, which occurred between the 6th and 14th in Colorado, Arizona, and New Mexico as results of heavy local summer-time rains.

On the 6th, according to newspaper reports, a dam across Virgin River near Littlefield, Ariz., was destroyed, with a considerable loss of livestock below; and at about the same time in Fremont, Otero, and Huerfano Counties of Colorado at least five bridges were destroyed, considerable damage was done to highways and crops, and the town of Walsenburg suffered some loss in tangible property. The newspaper estimate of these latter losses is \$75,000. Reports were received, also, of damage to the extent of about \$4,000 in the vicinity of Higbee, Colo. (Purgatoire River), and of \$1,375 in the vicinity of Fort Lyon, Colo. (Arkansas River), about the 7th. A saving of \$1,000 worth of property was effected at Fort Lyon through flood warnings.

A considerable rise—the result of torrential rainfall over the tributary drainage of the Puerco River—occurred in the Rio Grande at San Marcial, N. Mex., following the 9th. The crest, 5.5 feet, was the highest of record at that station. In spite of strenuous efforts to protect the levee at San Marcial, at least three breaks occurred in it, with the result that most of the town was flooded. No lives were lost, women and children having been removed to another city before serious inundation occurred. The damage in San Marcial and vicinity was estimated at \$50,000, in addition to which the villages of San Acacia and San Antonio, N. Mex., suffered considerable losses. Press reports state that at least 30,000 acres were overflowed between Socorro and San Marcial.

[All dates in August except as otherwise specified]

| River and station | Flood stage | Above flood stages— dates | | Crest | |
|---------------------------------------|-------------|------------------------------|-------|-------------|----------|
| | | From— | To— | State | Date |
| ATLANTIC DRAINAGE | | | | | |
| Santee: | <i>Feet</i> | | | <i>Feet</i> | |
| Rimini, S. C. | 12 | 1 | 3 | 12.2 | 2, 3. |
| Ferguson, S. C. | 12 | 3 | 5 | 12.3 | 4, 5. |
| EAST GULF DRAINAGE | | | | | |
| Etowah: Canton, Ga. | 11 | (1) | 1 | 15.8 | July 31. |
| MISSISSIPPI DRAINAGE | | | | | |
| Arkansas: | | | | | |
| Fort Lyon, Colo. | 6 | ----- | ----- | 8.5 | 7. |
| Lamar, Colo. | 8 | ----- | ----- | 8.8 | 8. |
| Great Bend, Kans. | 5 | ----- | ----- | 5.3 | 10, 11. |
| Purgatoire: Higbee, Colo. | 4.5 | ----- | ----- | 10.0 | 7. |
| Canadian: Logan, N. Mex. | 4 | ----- | ----- | 6.0 | 8, 10. |
| WEST GULF DRAINAGE | | | | | |
| Rio Grande: San Marcial, N. Mex. | 2 | ----- | ----- | 5.5 | 12. |
| PACIFIC DRAINAGE | | | | | |
| Colorado: Parker, Ariz. | 7 | (1) | (2) | 11.9 | June 2. |

¹ Continued from last month.² Continued at end of month.

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EFFECT OF WEATHER ON CROPS AND FARMING
OPERATIONS, AUGUST, 1929

By J. B. KINCER

General summary.—The outstanding important feature of the weather of the month was the continued drought which prevailed over practically all interior sections, including the Northwest and many Rocky Mountain dis-

tricts; at the close of the month conditions were still serious in most areas.

During the first decade there were beneficial showers in parts of the Ohio Valley, the middle Appalachian region, and locally elsewhere, but there was a serious deficiency of precipitation over the Northeast and the Northwest, especially the latter area where hot weather prevailed, intensifying the dryness. Moisture was ample from Kentucky southward and in parts of the Southwest and the southern Rocky Mountain area, but west of the Rockies there was practically no rainfall.

During the second decade there were sufficient rains in only a few rather restricted areas east of the Rocky Mountains, mainly in parts of the Middle Atlantic States and New England, but in much of the Lake region and generally over the section between the Mississippi River and the Rockies serious drought prevailed. Parts of the Southeast still had sufficient moisture, while conditions were favorable, due to previous rains, over southern Rocky Mountain sections, but most of the Pacific Northwest continued seriously dry.

During the last decade there was no appreciable improvement in the agricultural situation, with a general rain needed throughout the Ohio Valley and widespread, serious drought continuing in most of the States between the Rockies and the Mississippi River. Most late crops deteriorated, especially on uplands, while the ground was too hard and dry to plow in most sections. Timely and generous rains were very beneficial in the Appalachian region, while moisture conditions were still rather satisfactory in the southern Rocky Mountain area.

Small grains.—During the first decade harvesting and threshing winter wheat had been mostly completed in practically all parts of the eastern Ohio Valley, and to southern Iowa and Nebraska in the West. In the spring wheat sections rapid advance of harvesting, threshing, and combining was possible, with gathering of oats largely completed. There was some scattered threshing in the Ohio Valley during the second decade, but this work had been largely completed in the winter wheat area, except in the West, where it was well along. Harvest and threshing were also favored in the spring wheat region, with generally excellent harvest weather. During the last decade the weather favored late harvesting in the spring wheat area with cutting nearly done in most parts and threshing well along. Plowing was retarded generally due to hard, dry soil, although much had been accomplished in the eastern and lower Ohio Valley and north to Kansas in the West. The weather favored rice harvest, but flax suffered from lack of rain in the Dakotas.

Corn.—During the first decade corn made good progress in the Ohio Valley, where timely rains were beneficial, but the crop was still uneven in places. In Iowa progress was poor in the south and west where it was too dry, but fair elsewhere, with the bulk of the crop in milk and roasting-ear stages. In southern Missouri and Kansas and locally in Nebraska and South Dakota rains were favorable, but in much of the Southwest it was too dry for corn and much deterioration occurred. During the second decade conditions remained substantially unchanged, with a general need of rain in the western belt and severe suffering in some places, although in Iowa and Missouri the droughty conditions were mitigated somewhat by cool weather. During the last decade there was practically no relief from the dry conditions. Corn made fair progress in the eastern Ohio Valley, but in western parts there were complaints of firing and deterioration. The bulk of the crop was maturing too rapidly in Iowa and elsewhere west of the Mississippi River